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C O N T E N T S

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1. INTRODUCTION

This issue describes the reported rabies cases in Europe for the fourth quarter 1982. The situation in general is described under 2, and in individual countries under 2.1 to 2.26.

Data for the fourth quarter 1982 have not yet been received from the European part of the USSR, the rabies situation in the European part of the USSR in the 3rd quarter 1982 is included in this Bulletin.

In section 3 a review is given on data collected at the WHO Collaborating Centre from its beginning. For this 6 year-period the development of rabies in Europe is outlined. Under 3.2 a case of bat-rabies which recently occured in Germany (DEU) is described as well as the characterization of the isolated bat strain by means of monoclonal antibody and by mouse protection studies. 3.3 is a report of WHO-Consultations held in Geneva on the application of monoclonal antibodies in the characterization and differentiation of laboratory and field strains of rabies virus.

The rabies case data are tabulated for the fourth quarter 1982 and a summary accumulated for the whole year of 1982 under 4.

The last part lists the official contributors to this bulletin.

The geographical distribution of rabies cases in Europe during the 4th quarter 1982 is shown on the maps of Europe and Turkey in the Annex. One other map of Europe refers to the text under 3.1.

2. RABIES IN EUROPE, 4TH QUARTER 1982

During the fourth quarter 1982, 6132 cases of rabies were diagnosed in Europe. There were 4349 cases (70.9% of total) in wild animals of which 3908 were foxes (63.7% of total), 196 mustelids, 209 cervidae and 36 in unspecified animals or other species. Of the 1783 cases in domestic animals (29.1% of total), 389 were dogs (6.3% of total), 280 cats, 841 cattle (13.7% of total), 44 horses, 217 sheep and goats, 7 donkeys, 2 pigs, 3 others. It should be mentioned that Turkey, having a completely different pattern of rabies than all other countries in Europe in as much as the domestic animals are predominantly involved (489 cases or 98.8% of Turkeys total of the fourth quarter 1982), is included in the foregoing figures.

In comparison with the 3rd quarter 1982 (4838 cases) an increase of 41.4% is registered, when compared to the figures for the 4th quarter 1981 (5186 cases) an increase of 18.2% is noted. It is the highest fourth quarter of all years recorded at the Centre. There are only few countries with a slight decrease from the third to the fourth quarter: Italy (88 to 63 cases), Poland (195 to 190), Rumania (20 to 19), Turkey (529 to 495), all other countries are recording an increase.

During 1982 a steady increase of the rabies involvement of domestic animals is recorded (1/82 - 16.9%, 2/82 - 24.7%, 3/82 - 28.5%, 4/82 - 29.1%). This is a common trend as the outdoor keeping of domestic animals esp. bovines during the pasture season exposes these animals to rabid foxes.

Bulgaria, Finland, the United Kingdom, Ireland, the Netherlands, Portugal and Sweden continued to remain rabies-free and no cases were reported from Denmark, Greece and Norway.

There were no cases of rabies in man reported.

Individual country reports follow:

2.1 Rabies in Austria (AUT)

by W. Krocza and E. Scharfen

During the fourth quarter 1982, 259 cases of rabies were diagnosed in Austria. 215 of these were foxes (83%), 24 (9.3%) other wild animals and 20 (7.7%) domestic animals.

Compared to the previous quarter with 154 rabies cases (128 of these foxes) an increase of 68% and in comparison to the fourth quarter 1981 (185 cases) an increase of 48% is stated.

The frontwave of rabies in Lower Austria, south of the river Danube is curved (Bezirke Amstetten, Scheibbs, Melk, St. Pölten/Land, Lilienfeld, Neunkirchen, Wiener Neustadt/Land). For the first time in about 30 years rabies occurs north of the Danube in the Waldviertel (Bezirke Gmünd, Waidhofen an der Thaya) in the northern border area, facing the CSSR (CZE).

In the Burgenland the border areas of the Bezirke Neusiedler See, Oberpullendorf and Oberwart were affected by single outbreaks.

The Steiermark continues to be affected in the Bezirke Mürzzuschlag, Weiz, Graz-Umgebung, Leoben, Knittelfeld, Judenburg and most of all Murau. Newly infected in the eastern Steiermark is the Bezirk Hartberg.

The Bezirke Wolfsberg, Völkermarkt and St. Veit an der Glau in Kärnten are free of rabies, otherwise it occurs throughout the rest of Kärnten.

In east Tirol (Bezirk Lienz) the disease has decreased. There were cases in north Tirol to the north of the river Inn in all Bezirke.

The Bundesländer Vienna, Upper Austria and Salzburg were free of rabies.

In 1981, 779 animals were diagnosed rabies positive, and 961 in 1982. Of these 793 were foxes (647 foxes in 1981), 62 badgers (56), 40 roe deer (39), 19 other wild animals (19). The affected domestic animals increased from 18 in 1981 (6 cats, 6 cattle, 6 dogs) to 47 for the year presently reported: 20 cats, 17 cattle, 5 sheep, 5 dogs.

2.2 Rabies in Belgium (BEL)

by R. Depierreux

During the fourth quarter 1982 a total of 273 rabies cases were registered from 133 communities. There were 123 foxes, 115 cattle, 5 horses, 19 sheep, 1 goat, 2 dogs, 6 cats, 1 badger and 1 stone marten.

In the province of Liège the disease proceeded in northern and western direction. Two cases were diagnosed north of the river Meuse, namely in the community of Warnant-Dreye. As a matter of fact, these were two cattle being kept in an infected area, in Marche-en-Famenne, during the pasture season.

In the whole province of Luxembourg an extension of the disease towards the west is noted. Particularly from the region of March-en-Famenne the epizootic progressed into the province of Namur where 14 communities were newly infected as compared to the last quarter. Along the border of the most prominent extension of the rabies (the region of small game hunting) join at the moment previous epizootics in numerous places. One can assume that apart from isolated areas the frontwave of rabies seems to stabilize as seen before.

As anticipated, the two frontwaves of the disease seen at the beginning of the year in the north and south of the province of Luxembourg are presently joining. However, a decrease in the number of cases is noted in the extreme south of this province, which was the first part of the country being touched by a new rabies epizootic affecting Belgium and France.

2.3 Bulgaria (BUL)

The country remained rabies-free.

2.4 Rabies in Czechoslovakia (CZE)

by J. Neumann

During the 4th quarter of 1982 509 rabies cases were diagnosed. The fox accounted for the majority of cases (459 cases - 90.2%). In domestic animals rabies was diagnosed in 22 cats (4.3%), 8 dogs (1.6%) and 1 sheep (0.2%). New cases of rabies were diagnosed in the districts Pelhrimov and Martinov.

The total number of rabies cases in 1982 amounted to 1889 which is 72% more than in 1981 and 140% more than in 1979. The largest number of rabies cases occurred in the Czech Socialist Republic (1653 cases - 87.5%). In the Slovak Socialist Republic only 236 rabies cases were ascertained but it still means an increase by 168% in comparison with the year 1981.

Foxes accounted for the majority of rabies cases in wildlife (1715 - 90.8%). As far as other wildlife species are concerned, rabies was diagnosed in 28 badgers, 23 martens, 19 roe deer, 5 polecats, 3 wildcats and 1 stag. With regards to domestic animals, the cat was the most frequently infected animal (51 cases - 2.7%), dog (37 cases - 2%), 2 cattle and 5 sheep.

From the epizootiological point of view, the most important fact is the spreading of rabies toward the Elbe Lowlands (district Kolîn), to the Bohemian-Moravian Highlands (districts Pelhrimov, Zdár, Trebîc) and to the neighbouring Moravian inland (districts Brno, Blansko, Prostejov, Vyskov). These regions have been free from rabies since World War Two.

2.5 Rabies in Denmark (DEN)

by S. Møllgaard

The incidence of rabies during the reporting period: no cases of rabies in October, November and December 1982.

No rabies control measures were executed during the past three months.

2.6 Rabies in Germany, Democratic Republic (DDR)

During the fourth quarter 1982, 635 cases of rabies were reported. 478 of these (75.3% of total) were in wild animals and 157 in domestic animals. No human case was reported. The different species affected were: 436 foxes, 14 mustelids, 28 deer, 17 dogs, 45 cats, 41 cattle, 3 horses, 50 sheep and goats and 1 donkey.

Compared to the previous quarter there has been an increase by 218 cases whereas in comparison with the 4th quarter 1981 (557 cases) there has been an increase of 14%.

The Bezirk Rostock in the north, the Bezirke Schwerin, Magdeburg, Erfurt, Suhl along the western border and Gera and Karl-Marx-Stadt in the south report the heaviest density of cases, the Bezirke of the central and eastern part of the country report a lower density. This compares well with the previous quarter.

2.7 Rabies in Germany, Federal Republic (DEU)

A total of 2010 rabies cases were reported during the 4th quarter 1982. 1554 of these (77.3%) were in wild animals (64.7% in foxes, 1.7% in badgers, 3.8% in other mustelids, 6.9% in deer, one racoon, one wild boar, one mouflon and one squirrel), 456 (22.7%) in domestic animals (1.1% in dogs, 3.4% in cats, 14.8% in cattle, 0.7% in horses, 2.6% in sheep and goats plus 1 pig).

In comparison with the previous quarter (1555 cases) there has been an increase of 29.3%. The increase is mainly due to the high number of rabid cattle. Looking at the first two quarters (72 rabid cattle) we see the common trend that cattle were more involved in rabies during the third and fourth quarters (474 rabid cattle) due to their exposure to rabid foxes during the pasture season. Considering 546 reported cases in cattle for 1982 it becomes obvious that this zoonosis has its economic dimension as well.

There is also an increase compared to the fourth quarter 1981 (1376 = 46.1%). The annual figure (6551) is close to that of 1980 (6605), it is the third highest figure since 1976 (8826).

Areas of the country currently heavily infected are Hessen, the Regierungsbezirke Darmstadt (210) and Kassel (359), the south western tip of Nordrhein-Westfalen, here the Regierungsbezirk Köln (147), Baden-Wuerttemberg with all four Regierungsbezirke: Stuttgart (122), Karlsruhe (97), Freiburg (138) and Tübingen (112) and Bayern with the Regierungsbezirke Oberbayern (100) and Schwaben (98).

Though Schleswig-Holstein is sparsely infected two cases should be mentioned. They newly occured in the district (Kreis) Schleswig-Flensburg bordering to rabies-free Denmark. They are one cat in the municipality (Gemeinde) Busdorf and one bovine in the Gemeinde Klein Rheide.

2.8 Finland (FIN)

The country remained rabies-free.

2.9 Rabies in France (FRA)

by J. Blancou

i) 4th quarter 1982

738 rabies cases were reported during the 4th quarter 1982, 32 cases less than during the 3rd quarter (4.2% reduction). Of the total, 494 cases were accounted for by the fox (67.2%), 27 cases in other wild animals and 217 in domestic animals (15 dogs, 37 cats, 108 cattle, 45 small ruminants and 12 horses).

A particular high number of cases came from the department Jura (130).

The general tendency described for the previous quarter remains. Especially, there are little fluctuations along the western front wave. However, there is an increase of the advance southwards in the direction of the department Isère where three new cases were reported.

ii) Evolution of rabies in France in 1982

by L. Andral

In order to account rabies for the year I have looked at the documents at hand on a month by month basis, and I have aimed at drawing the conclusions they suggest to me in the most objective manner possible.

The development of the rabies epizooty can be studied as a function of two principle parameters:

a) the importance and localisation of the affected regions,

b) by the number of the reported cases in relation to the different animal species.

The first part of this study shows a stable geographic situation: 25 departments of the northeast of France were affected in 1981, more or less the same number still affected the enzootic area 1982 with the only changes being the freeing of the department Seine Maritime and the new outbreak in the department Nièvre.

Conclusion: the front has been "stabilized", in a general way. The "inevitable" advance by 30-40 km per year, which has been hitherto described, has come to a stop. I state this fact and I am delighted about it, without being able to give accurate reasoning.

The second part of this account bears on the number of registered cases of rabies and on the species involved. Table 1 shows that 3394 cases were counted during the year, of which 2521 were in wild animals and 874 in domestic animals.

I have reconstructed the development of the epizooty solely on the basis of the rabies cases reported in domestic animals. And there Table 2 "speaks" for itself. All records have been broken, even those in 1976.

Conclusion: 1982 has been a year during which a very high incidence of rabies was reported in domestic animals. Among these 70 dogs and 128 cats representing a far from negligible risk for human health as well as the 673 herbivores affected by the disease, considering a possible contamination.

The evolution of the rabies enzooty in France since 1972 is shown in the graph. Without any possible doubt, we can see the multi-annual cycle of the disease. Though the rabies development is comparable for several years, one special point must however be noted: the 1982 spring and sommer "decline" has been extremely weak although the domestic animal populations have more or less remained constant in the affected zones.

On the other hand one must equally observe that this weak decline has continued during the last quarter of 1982, contrary to what one should have expected from the figures of the preceding years in which an increase of cases during that period of the year was generally observed.

Can one deduce from this that the epizooty has led to such a high mortality in the fox populations that the absolute number of surviving animals, which actually remain available for transmitting the disease to domestic animals, has been reduced? The way the epizooty will develop during 1983 will perhaps allow us to form an opinion about the validity of this hypothesis.

Summary of the conclusions:

The front line of the rabies has not "advanced" in 1982.

The number of reported rabies cases among the domestic animals in the 25 affected departments has quadrupled since 1978.

Wouldn't it be advisable (and indispensable) to draw from this double observation the consequence of doing more, better and differently in the prophylactic campaigns against vulpine rabies in those regions of the endemic?

P.S. During the last weeks of 1982 several rabies cases were reported in animals imported at the occasion of people returning from vacations in countries in which this disease has achieved endemic proportions among domestic carnivores.

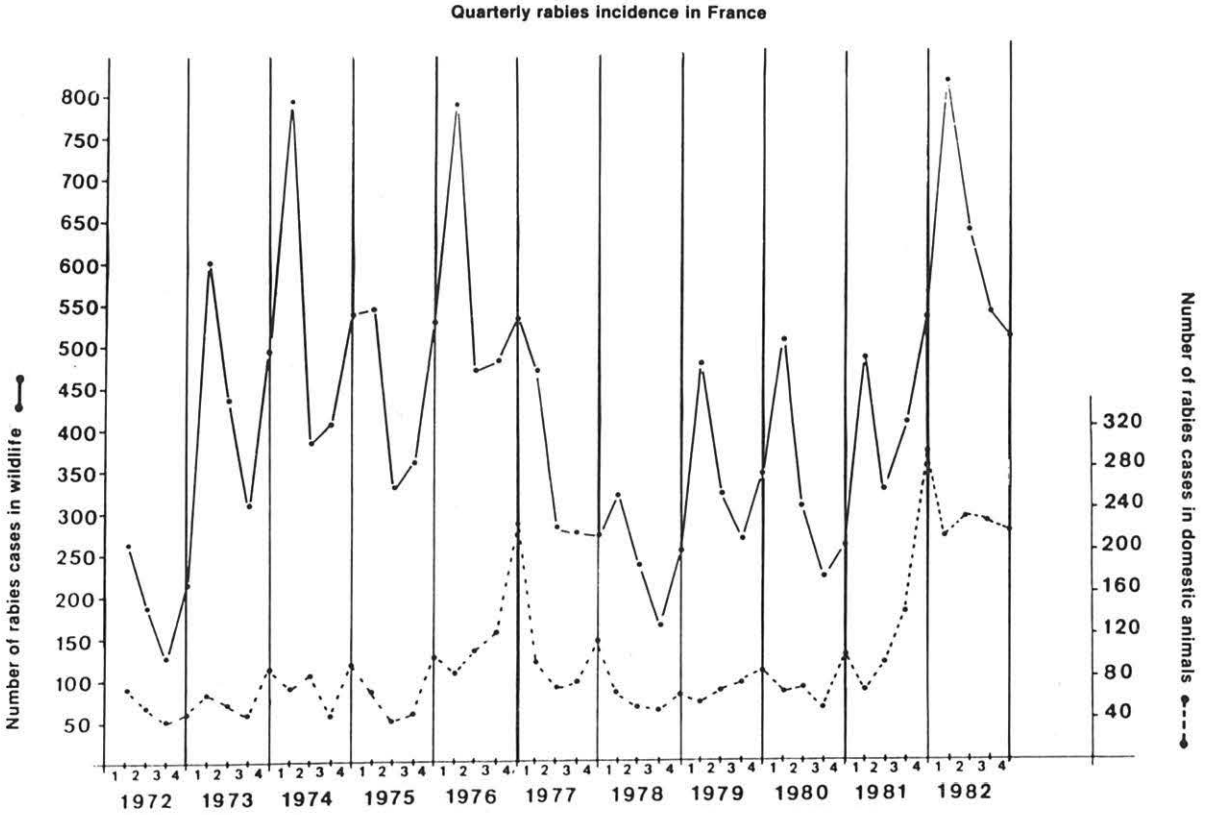
Table 1[x)]: Number of rabies cases reported in France for the 4 quarters 1982

1982	Wild animals	Domestic animals	Total animals species
1st quarter	817	207	1023
2nd quarter	643	231	874
3rd quarter	543	227	770
4th quarter	518	209	727
Annual total	2521	874	3394

Table 2[x)]: Evolution of the reported rabies cases of domestic animals in relation to species from 1976 to 1982.

	Dogs	Cats	Cattle	Sheep/ Goats	Horses	Others	Total species	Number of departments infected
1976	62	111	273	75	22	2	545	21
1977	40	89	175	47	14	0	365	24
1978	40	46	102	34	6	0	228	25
1979	49	39	131	59	15	0	342	26
1980	47	53	111	70	25	0	306	26
1981	45	90	323	129	19	2	608	25
1982	70	128	347	289	37	3	874	25

x) The editors would like to point out that there may be slight deviations of the above figures from those of the bulletin. In original articles we shall always refer to the figures presented.



2.10 Rabies in Greece (GRE)

No cases of rabies were reported in the fourth quarter.

2.11 United Kingdom (GBR)

The country remained rabies-free.

2.12 Rabies in Hungary (HUN)

A total of 339 cases of rabies were diagnosed in Hungary during the fourth quarter 1982. There were 311 cases (91.7% of total) in foxes, 2 in wild cats, and 26 in domestic animals (5 dogs, 15 cats, 4 cattle, 1 sheep, 1 pig). Compared with the previous quarter (187) there has been an increase of 81.3%, compared with the fourth quarter 1981 (372) a decrease of 8.9%. The annual total comes to 1373 cases.

There are reports from all Komitates in Hungary during this quarter from one to 20 cases, three are heavier infected: Borsod-Abau-Zemplen (56), Fejer (37) and Pest (35). Throughout the year 1982 there were five Komitates with a similar heavy infection rate, the three above mentioned and Vas and Veszprem.

A main feature of rabies in Hungary is the extreme high involvement of the fox. Of an annual total of 1373 cases 1260 (91.8%) are in foxes.

2.13 Ireland (IRE)

The country remained rabies-free.

2.14 Rabies in Italy (ITA)

by S. Prosperi

During the 4th quarter 1982, 63 cases of rabies have been reported in 32 different municipalities of the Alps (sited in the provinces of Sondrio, Brescia, Bozano, Belluno, Udine and Gorizia); of these, 17 cases were in 8 previously rabies-free municipalities and 46 in 24 previously infected ones.

The infection involved only wild animals: 59 foxes, 2 badgers, 2 pine martens. The 8 infected municipalities, covering a total extension of 461.5 km^2 (Sappada, Caiolo, Ponte in Valtellina, Novate Mezzolo, S. Giacomo Filippo, Piateda, Prata Camportaccio, Paisco Loveno) belong to 3 different provinces (Belluno, Sondrio, Brescia) of the regions of Veneto and Lombardy.

During all of 1982, 345 cases of rabies were diagnosed in the municipalities of the Alps, namely: in 291 foxes (84.3%), 31 badgers (9%), 10 other mustelids (2.9%), 5 deer (1.4%), 4 dogs (1.2%), 3 cats (0.9%), 1 sheep. Since sylvatic rabies entered Italy (February 1977), the disease was ascertained in the dog for the first time.

During 1982, 50 municipalities belonging to 4 different Regions (Friuli, Veneto, Alto Adige, Lombardy), covering 2,447 km^2 in all, were found to be infected for the first time.

During the present year, in comparison with 1981 when 365 cases were diagnosed, a slight decrease in positive cases was observed. This finding should not be considered only per se, but also in connection with the fact that the geographic area affected by sylvatic rabies epidemic increased significantly more in 1982 than in previous years (2,447 km^2).

2.15 Rabies in Luxembourg (LUX)

by R. Frisch

During the fourth quarter 1982 a total of 107 rabies cases are reported, 77 of these in domestic and 30 in wild animals. This is the highest incidence in the Grand Duchy of Luxembourg since 1968.

The heavy increase in rabies is indirectly attributed to the extremely high population density of foxes, a situation favoured by a lack of interest of hunters to reduce the fox population on the one hand but as well an increasing resistance of the Societies for Prevention of Cruelty to Animals against gassing of fox dens.

The total of 205 rabies cases have been reported for 1982. Out of these we have the following species:

73 cattle	94 foxes
18 sheep	6 roe deer
4 cats	3 weasel
2 horses	3 badgers
1 goat	1 marten

The only areas without rabies in 1982 were the south and the east of Luxembourg. Considering the great adaptability of the fox an extension of rabies into these two areas in 1983 is expected. It is intended to initiate an intensive hunting in these parts of Luxembourg and to increase the bounty for foxes substantially.

2.16 Netherland (NET)

The country remained rabies-free.

2.17 Norway (NOR)

No case of rabies was reported from the Island of Svalbard in the fourth quarter 1982.

2.18 Rabies in Poland (POL)

A total of 190 rabies cases were reported during the 4th quarter 1982. These are five cases less than the previous quarter and compared to the 4th quarter 1981 (100) one notices an increase of 90%.

There were 131 cases in wild animals (68.9% of total), and 59 in domestic animals.

In the 4th quarter 1981 the rabies cases were evenly distributed throughout the country while within the last year a concentration of rabies infection in the west and, to a less degree, in the north can be noticed. The departments Koszahn, Szczecin, Zielona Gora, Jelenia Gora, Legnica and Walbrzych report in the fourth quarter 1982 13 to 25 cases, all other departments of the country between 1 and 9.

2.19 Portugal (POR)

The country remained rabies-free.

2.20 Rabies in Rumania (RUM)

During the fourth quarter 1982, 19 cases of rabies were diagnosed in Rumania. This is one case less than the previous quarter. Out of 19 cases 13 were in wild animals (13 foxes, 4 badgers) and 6 in domestic animals (2 dogs, 3 cats, one bovine).

The cases are scattered throughout Rumania with 1 to 2 cases per district, except for Hunedvara with 6 cases.

There were 91 rabies cases reported for 1982, these are 37 cases less than for 1981 (28.9% decrease). Generally the domestic animals are diagnosed rabid more often than wild animals and the fox is reported rabid less compared to most of the European countries.

2.21 Rabies in Spain (SPA)

No case of rabies was reported during the fourth quarter 1982.

2.22 Sweden (SWE)

The country remained rabies-free.

2.23 Rabies in Switzerland (SWI)
by A. Wandeler

During the 4th quarter of 1982, the Swiss rabies diagnostic centre received 1373 animals for examination. 258 of these (19%) were positive for rabies, compared with 222 (24% of 925) in the previous quarter and with 232 (20% of 1152) in the last quarter of 1981. 59% were in foxes and 31% in domestic animals. An additional 24 foxes, 1 marten, 1 badger and 1 wild boar were diagnosed histologically in canton Vaud. They bring the total of proven rabies cases to 285 (258 in the previous quarter).

About one third of the domestic animal cases were observed in cats, another third in cattle. None of the cattle cases came from a canton with compulsory vaccination of heifers.

During the period of observation the density of rabies cases increased in western and in northeastern Switzerland, and decreased in western canton Berne, in central Switzerland and in canton Graubünden. Areas with decreasing rabies incidence are essentially coinciding with areas of experimental oral fox vaccination against rabies.

During this last quarter of 1982 six persons were bitten by proven rabid cats.

2.24 Rabies in Turkey (TUR)

During the fourth quarter 1982, a total of 495 cases of rabies were diagnosed in Turkey. There were 489 cases in domestic animals: 297 dogs, 26 cats, 143 cattle, 1 horse, 15 sheep and goats, 6 donkeys and 1 unspecified animal; and 6 wild animals including one fox.

In comparison with the previous quarter (529) there has been a reduction of 6.4%, compared with the fourth quarter 1981 (538) a reduction of 8.0%.

Concentrations of rabies cases were reported from the provinces Bursa, Istanbul and Izmir.

The annual rabies figure for Turkey is 2172 cases in 1982, 88 cases less than 1981. The overall geographical distribution of cases remains the same; in the south and east of the country cases reported are scattered, in the north and west they are more concentrated.

The outstanding feature for the rabies in Turkey is the high involvement of domestic animals throughout the year; for 1982 2140 cases (98.5%), of these 1342 dogs, 104 cats, 554 cattle, 15 horses, 88 sheep and goats and 37 others.

2.25 Rabies in Yugoslavia (YUG)
by M. Petrović

i) Rabies account for the 4th quarter 1982

During the 4th quarter 1982, a total of 210 cases of rabies were reported in Yugoslavia. There were 194 cases in wildlife of which 187 were foxes (89% of total), 7 other wild animals (mouflon, skunk, marten, hedgehog, rabbit, rat) and 16 in domestic animals (8 cats, 6 cattle, 2 others).

There has been an increase of cases from the 3rd quarter (126) by 66.7%. Compared to the 4th quarter 1981 (322) we notice a reduction of cases by 34.8%.

Rabies infection continues to affect the northern strip of Yugoslavia (Wojwodina, Croatia and Slovenia) but one area has been reported newly infected. This area is far south from the northern front line of rabies distribution in Yugoslavia and can become the focus to extend rabies in many unaffected districts. The area comprises of three districts: Bosna Grahovo, Livno and Sinj. They reported during the 4th quarter 1982 17 cases of wildlife rabies (15 of these foxes) and two cases in cattle.

ii) Evolution of rabies in Yugoslavia in 1982

In SFR Yugoslavia both main forms of rabies are present, but on separate territories: urban rabies in dogs and domestic animals in the middle and southern parts, and sylvatic rabies in foxes in the northern parts of the country, representing the border line of sylvatic rabies in the central and western Europe.

Urban rabies was relatively under control, but the sylvatic has been in further expansion. As we underlined in our previous report, human cases were not recorded in 1982. Namely, the interdependence of human rabies and animal cases is greater in urban than in sylvatic rabies, as it has been stated earlier.

In 1981 we registered 2116 cases of animal rabies - it was the greatest number since 1946, and in 1982 rabies spread over the largest territory registered in one year (it was diagnosed in 132 communities) representing the worst epizootiological situation ever recorded in our country. The reason lies in the fact that sylvatic rabies breaks out over and over in uninfected regions as well as in already infected ones.

In 1982 rabies was registered in the territory of 132 communities in 1276 animals. In comparison with 1981 the number of infected communities increased (27), but the number of animal cases was lower (840 cases less).

According to animal species there were: 9 dogs (0.7%), 21 cats (1.6%), 12 cattle (0.9%), 1 sheep (0.1%), 2 goats (0.2%), 1 swine (0.1%), and 1191 foxes (93.3%), 20 badgers (1.6%), 12 roe-deer (0.9%), 2 wildcats (0.2%), as well as 1 wolf, 1 skunk, 1 hedgehog, 1 marten and 1 wild boar, i.e. in 1230 wild animals (96.4%) and only 46 domestic animals (3.6%). Foxes are the main vector of rabies and the animal mostly infected with rabies among wild animals (96.8%).

Urban rabies appeared again in SR Macedonia (see Map Jugoslavia: IV) in one community - Tetovo - in 1 dog, and in SAP Kosovo (Map: VI_2) in one community - Pristina - in one cow. This is the proof that enzootic rabies is constantly present, but is registered only occasionally in sporadic cases in domestic animals. In the territory of SR Serbia (Map: VI) rabies was diagnosed in 2 communities: Aleksinac (territory characteristic for urban rabies) and in Belgrade with all characteristics of sylvatic rabies existing in the neighbouring SAP Vojvodina (Map: VI_1).

In 1982 sylvatic rabies spread in SR Croatia (Map: III) and SAP Vojvodina with an increased number of animal cases, but it diminished in SR Slovenia (Map: V). In this republic the highest wave of sylvatic rabies was recorded in 1981. However, in SR Croatia and SAP Vojvodina, apart from new territories infected in the existing epizootic, a new wave of rabies appeared at the end of 1981 and the beginning of 1982 in regions which were first infected in 1978.

The appearance of a new focus of sylvatic rabies in 1982 on the territory of 2 communities of southwestern Bosnia and Hercegovina (Map: I) (Livno and Bosansko Grahovo) and 1 community in Croatia (Sinj) is very interesting. These regions are about 400 km away from the existing epizootic in Croatia and it is very hard to explain, since rabies is a "chain" infection and its propagation can be, most often, followed very easily.

The diagnosis of rabies in Yugoslavia is performed in about 10 regional veterinary institutes by the FAT method and biological assay in white mice.

The preventive vaccination, which is performed annually, of over 1,200.000 dogs is obligatory, with live antirabic vaccine type Flury LEP (chicken embryos) and Flury HEP (chicken fibroblast tissue culture) produced in two veterinary production institutes in Yugoslavia. Cats are vaccinated only on voluntary basis with Flury HEP vaccine, cattle and other domestic animals in endangered territories with the inactivated Hempt's vaccine, and in recent times with the imported inactivated tissue culture vaccine.

Antirabic treatment of humans is performed in over 110 antirabies stations, mainly with the imported HDC vaccine, less with the Hempt's vaccine. Horse antirabies serum as well as human hyperimmune gammaglobulin (in small quantities), both of Yugoslav production, are also used. Over 3000 persons are treated annually.

At the end we would like to emphasize, that in the existing very severe epizootiological situation in our country, after 10 years (1971-1980) when human cases were present, this is the second year in which this zoonose was not recorded in man.

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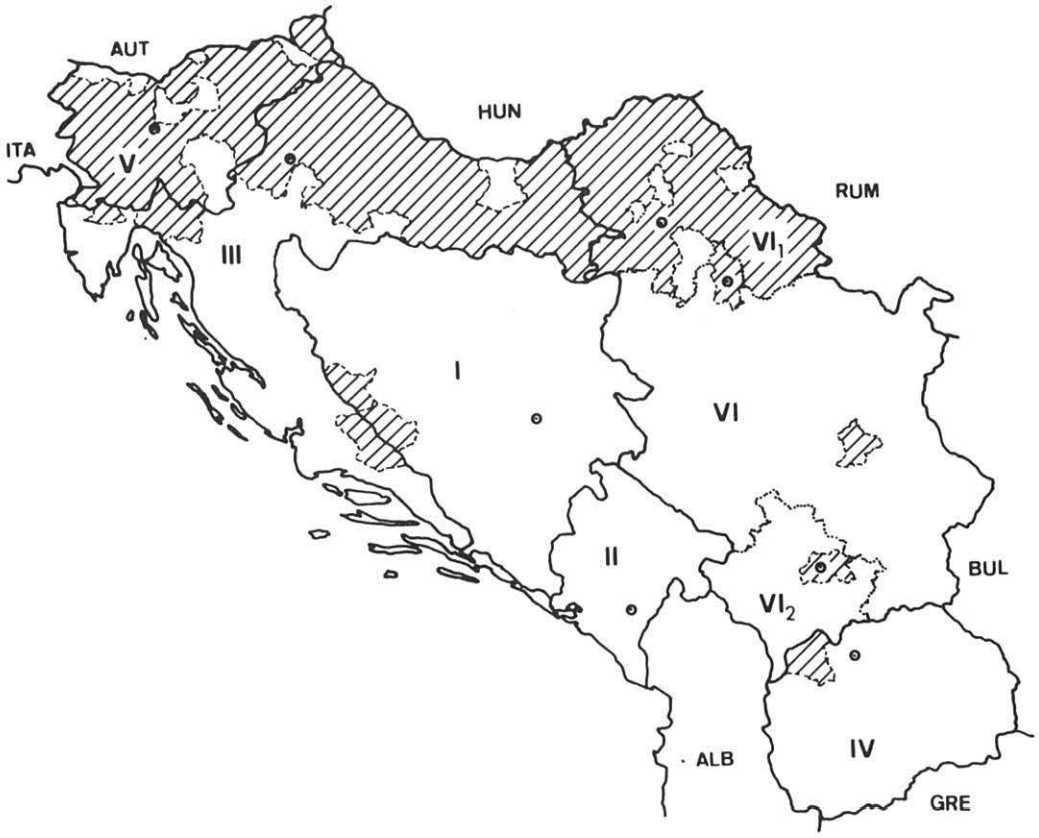

Map: Rabies incidence in Yugoslavia, 1982

2.26 Rabies in the Union of the Soviet Socialistic Republics (USSR)
by V. Pokrovskiy and B. Cherkasskiy

3rd Quarter 1982

In the third quarter of 1982 in the European part of the USSR territory 168 cases of rabies of animals were recorded. This is an increase of 30 cases over the previous quarter of this year and of 87 cases as compared with the third quarter of 1981.

As in previous periods, the majority of rabies cases (52.4%) was recorded in the territory of the Ukraine, 13.1% in Belorussia and 10.7% in central regions.

In other territories of the European part of the USSR single cases were recorded. No cases were recorded in the north and north-west of the country.

An increase of rabies cases in the European part of the USSR in the third quarter of 1982 is associated with an increase of 27 cases in the Ukraine as compared with other territories where the distribution of cases remained at the same level as in the previous quarter.

3. MISCELLANEOUS

3.1 Six years of rabies data collection at the WHO Reference Centre - a summary

Six years ago first data were collected for what is now the European Rabies Surveillance System with 26 countries participating. Considering the sources of possible mistakes for exact data, originating from the different reporting systems, the different awareness and attitude of people towards the disease and the handing in of rabies suspected samples, the laboratory diagnosis, the identification of the infected species, to name a few, we will have to try on to improve the system. Nevertheless, if we know about the mistakes we are not far from reading our figures correctly.

In this short summary we are not ambitious as to interpret the figures for future trends and developments but want to assess where we stand 1982 after 6 years of reporting.

The figures are shown on the map in the Annex. They cover the period of 1977 to 1982 in continuous columns.

Looking at the distribution of the rabies in Europe special attention must be given to the frontwave of the disease. Denmark (DEN), rabies free in the northern part of the country, has been reporting cases in all the six years from South Jutland. In spite of great control efforts in a combat zone, bordering with Germany (DEU), the disease was able to get a hold in the country.

More fortunate were the Netherlands (NET) with 2 cases in 1977 and 1 case in 1979.

Off the front line are the rest of the countries of Northern Europe. Sweden (SWE) and Finland (FIN) remained rabies-free. Norway (NOR) only reported cases from the Island of Svalbard, nearly 1000 km north of mainland Norway, in 1980 and 1981. Species affected were polar fox, reindeer and seal.

The United Kingdom (GBR) had two human cases in 1978 and 1981 but both were acquired in India. Ireland (IRE) remained rabies-free.

In Belgium (BEL) the frontwave of rabies is advancing in the western direction. The figures have gone up and we learn that the disease has recently crossed the river Meuse. Advancing of the front and then stabilizing have been alternating.

In Luxembourg (LUX) figures are increasing.

A new situation has arisen on the western front, in France (FRA). The frontline is not advancing, 24-26 departments have been infected over the last years, the "inevitable" advance by 30-40 km per year, which has been hitherto described, has come to a stop. The cases though have gone up and one other unpleasant aspect can be noted: a relative increase of infected domestic animals.

In Switzerland the figures have not changed very much during the period reported.

Not attached to the rabies front are Portugal (POR) and Spain (SPA). Portugal remained rabies-free. Spain had 6 cases in 1977, 3 in 1978 and from 1979 to 1982 each year one case. 8 of the 13 cases originate from North Africa.

The southern frontwave has advanced in Italy (ITA) and Yugoslavia (YUG). Italy was in the northern part infected from Switzerland and Austria, and figures have gone up. The northern strip of Yugoslavia is infected with advances of the central European sylvatic rabies and in some middle and southern parts of the country with urban rabies.

Not connected to the central European sylvatic rabies are Bulgaria (BUL), with one reported case in a pig within this 6 year period, Albania (no data), Greece (GRE), with only very few cases and Turkey (TUR). The latter country is dominated by the urban or dog rabies cycle. The reported cases have gone up.

Rabies throughout the country we find in the Federal Republic of Germany (DEU), the German Democratic Republic (DDR) and Hungary (HUN) with figures little changing, in Austria (AUT) and Poland (POL) slightly decreasing and Czechoslovakia (CZE) increasing.

In eastern Europe Rumania (RUM) has very few cases scattered throughout the country, and the European part of the Union of the Soviet Socialistic Republics (USSR) reports rabies cases with little change.

The following is a summary on human cases from 1977 to 1982.

Country	No of cases	Year
Poland	1	1977
Rumania	3	1977
Switzerland	3	1977
Turkey	5	1978, 1979
Austria	1	1979
France	2	1979, 1980
Yugoslavia	4	1979, 1980
German Democratic Republic	1	1981
United Kingdom (acquired in India)	2	1978, 1981
Belgium	1	1981
Total	23	

Projected onto the map is a graph summarising all cases in Europe. It shows that in spite of all efforts to control the disease the reported rabies cases are increasing year by year.

3.2 A new case of bat-rabies in Germany (DEU)

In August 1982, a bat entering the premises of the US Army Hospital in Bremerhaven, Federal Republic of Germany, was caught and submitted for rabies examination. The bat brain was found rabies-positive by FA and mouse inoculation procedures conducted at the US Army Hospital in Landstuhl. Subsequent examination of the virus isolate at the Rabies Centre of the Federal Research Institute for Animal Virus Disease in Tübingen confirmed the results, however revealed particularities of the virus strain which are uncommon for the virus of the present fox epizootic. Similar findings were recorded on two previous virus isolates from bats caught in Northern Germany.

Bat-rabies in Europe is rarely reported. One reason for this is the steady decrease of bat populations in number and seize during the past decades mainly due to habitat destructions caused by man. Still, the few cases recorded (see Table 1) do not indicate much of their epidemiological importance as the information collected till now remains scarce.

In Europe we are dealing with non-haematophagous bats only, mainly of two insectivorous families: Rhinolophidae and Vespertilionidae.

Reports from the USA and Canada reveal that rabies has been found in 30-40 bat species indigenous to North America, and the disease has been detected in all 48 contiguous States and most of the Canadian provinces. The rabies prevalence rate in insectivorous bats is usually not greater than 2%. Since 1953, there were 8 human fatalities in the US attributed to the actual bites of rabid bats, in addition to two other human deaths due probably to nonbite aerosol transmission in a Texas cave.

Individual bat-rabies cases reported in Europe are shown in the following Table:

Geographic Location	Year Reported	Genus and Species	References
1 Hamburg (DEU)	October 1954	-	Mohr (1957)
2 Yugoslavia	1954	Nyctalus noctula	Nicolič and Jelesič (1956)
	1956	Nyctalus noctula	Nicolič (1957)
3 Turkey	1956	Rhinolophus ferrum-equinum	Tuncman (1958)
4 Jena (DDR)	July 1963	Eptesicus serotinus	Pitzschke (1965)
5 Hamburg (DEU)	July 1968	-	Wersching and Schneider (1969)
6 Stade (DEU)	1970	-	WHO Reference Centre for Rabies, Tübingen (DEU)
7 Bremerhaven (DEU)	August 1982	-	WHO Reference Centre for Rabies, Tübingen (DEU)

A total of four cases have been reported from the German coastal area: Hamburg, Stade and Bremerhaven. Unfortunately a taxonomic identification of the bats was not carried out.

By means of monoclonal antibodies and by mouse protection studies the three bat virus isolates 5, 6 and 7 (Table 1) have been characterised and compared to African origin viruses as well as to the virus of the present fox epizootic in Europe.

The results indicate the identity of the Stade and Bremerhaven viruses, a close relationship to the Hamburg isolate and to certain virus isolates from South Africa. The relationship of the German bat isolates towards the wildtype virus found in foxes and other animals from Europe was significantly different.

The following questions arise:

1. Did the virus originate from Africa? - The possibility that bats are transported to Europe by ship seems possible, but do bats have a chance to reach the mainland?
2. Has the virus established itself in European bat populations or other terrestrial animals?
3. How is it maintained?
4. What is the epidemiological importance of the bat-rabies?

(Data from the Federal Research Institute for Animal Virus Diseases, D7400 Tübingen.)

3.3 Information on WHO consultations

Report of consultations on the application of monoclonal antibodies in the characterisation and differentiation of laboratory and field strains of rabies virus - 16-18 September 1982, Geneva

Introduction and summary

Until recently, all strains of rabies virus were considered to be antigenically similar on the basis of conventional immunological tests. Antigenic differences among fixed and street rabies virus strains can now be readily detected in both nucleocapsid and glycoprotein antigens using a panel of monoclonal antibodies (MCA) obtained from fusion of mouse myeloma cells with spleen cells derived from mice immunized with rabies virus antigens.

A basic panel of three anti-nucleocapsid monoclonal antibodies is sufficient for differential diagnosis of rabies infection by staining impressions of brain tissue from infected men or animals and for recognizing immediately whether infection is due to rabies virus or a rabies-related virus. An additional three antibodies allow the identification of the rabies-related viruses as Lagos, Mokola or Duvenhage strains.

The anti-glycoprotein monoclonal antibodies allow differentiation of laboratory strains of rabies virus from one another, from field strains as well as from rabies-related viruses. Further, analysis of a number of street virus strains reveals patterns of reactivity that are characteristic for animal species within a given geographical location.

Using a number of antigenic variants selected by treatment of viral stock with monoclonal antibodies specific for glycoproteins, it was shown that a small difference in composition of virus glycoprotein results in reduced protection in vaccinated mice.

This study with only partial protection to challenge leads to the hypothesis that antigenic variations among strains of rabies virus could be responsible for failure of vaccine prophylaxis in men or animals and therefore this highly important question should be further investigated. Special attention should be given to virus isolates from victims of rabies who die following a complete post-exposure treatment and from animals that succumb to rabies despite previous vaccination.

Recommendations

Further use of monoclonal antibody should be devoted to the following areas:

1. The study of the antigenic characteristics of rabies virus strains from different geographical areas. This will help to clarify the epidemiological events.

2. Efforts should be made for the preparation of monoclonal antibodies specific for selected field viruses representing rabies reservoirs from different parts of the world.

3. Until the host range of rabies-related viruses is more accurately established, routine diagnosis of all rabies-suspected cases in areas where rabies-related viruses could be present should include a panel of monoclonal antibodies capable of identifying the viruses.

4. Monoclonal antibody reactivity patterns of all viruses used for vaccine production should be established. This will allow differentiation of vaccine-induced rabies in animals.

TABLE 1

EUR EUROPE **4/82** RABIES CASES 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
AUT	AUSTRIA	2	7	9	-	2	-	20	215	8	5	11	-	239		259
BEL	BELGIUM	2	6	115	5	20	-	148	123	1	1	-	-	125		273
BUL	BULGARIA *							0						0		0
CZE	CZECHOSLOVAKIA	8	22	-	-	1	-	31	459	7	5	7	-	478		509
DDR	GERMAN.DEM. REPUBLIC	17	45	41	3	50	1	157	436	-	14	28	-	478		635
DEN	DENMARK *							0						0		0
DEU	FED.REP. OF GERMANY	23	69	297	14	52	1	456	1300	34	77	139	4	1554		2010
FIN	FINLAND *							0						0		0
FRA	FRANCE	15	37	108	12	45	-	217	494	7	-	6	14	521		738
GBR	UNITED KINGDOM *							0						0		0
GRE	GREECE *							0						0		0
HUN	HUNGARY	5	15	4	-	1	1	26	311	-	-	-	2	313		339
IRE	IRELAND *							0						0		0
ITA	ITALY							0	59	2	2	-	-	63		63
LUX	LUXEMBOURG	-	2	64	2	9	-	77	27	-	1	2	-	30		107
NET	NETHERLANDS *							0						0		0
NOR	NORWAY *							0						0		0
POL	POLAND	17	14	23	3	2	-	59	112	2	7	7	3	131		190
POR	PORTUGAL *							0						0		0
RUM	RUMANIA	2	3	1	-	-	-	6	9	4	-	-	-	13		19
SPA	SPAIN *							0						0		0
SWE	SWEDEN *							0						0		0
SWI	SWITZERLAND + LIECHT	1	26	30	4	20	-	81	175	9	10	9	1	204		285
TUR	TURKEY	297	26	143	1	15	7	489	1	-	-	-	5	6		495
YUG	YUGOSLAVIA	-	8	6	-	-	2	16	187	-	-	-	7	194		210
TOTAL		389	280	841	44	217	12	1783	3908	74	122	209	36	4349	0	6132
PER CENT		6.3	4.6	13.7	0.7	3.5	0.2	29.1	63.7	1.2	2.0	3.4	0.6	70.9	0.0	100.0

* NO CASES.

TABLE 2

EUR EUROPE **1982** RABIES CASES 1. 1.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
AUT	AUSTRIA	5	20	18	-	5	-	48	794	64	15	42	-	915		963
BEL	BELGIUM	3	24	211	8	58	-	304	355	4	8	4	-	371		675
BUL	BULGARIA *							0						0		0
CZE	CZECHOSLOVAKIA	37	51	2	-	5	-	95	1715	28	28	20	3	1794		1889
DDR	GERMAN DEM. REPUBLIC	62	104	89	5	102	3	365	1464	6	38	78	4	1590		1955
DEN	DENMARK	-	-	1	-	-	-	1						0		1
DEU	FED.REP. GERMANY 1)	56	192	546	37	222	8	1061	4659	137	257	426	11	5490		6551
FIN	FINLAND *							0						0		0
FRA	FRANCE	75	129	346	39	289	3	881	2396	41	-	19	68	2524		3405
GBR	UNITED KINGDOM *							0						0		0
GRE	GREECE	1	-	-	-	-	-	1						0		1
HUN	HUNGARY	23	54	20	-	4	1	102	1260	4	-	2	5	1271		1373
IRE	IRELAND *							0						0		0
ITA	ITALY	4	3	-	-	1	-	8	291	31	10	5	-	337		345
LUX	LUXEMBOURG	-	4	73	2	19	-	98	94	3	4	6	-	107		205
NET	NETHERLANDS *							0						0		0
NOR	NORWAY *							0						0		0
POL	POLAND	32	37	58	4	3	-	134	404	8	15	47	19	493		627
POR	PORTUGAL *							0						0		0
RUM	RUMANIA	8	9	17	3	12	-	49	35	5	-	-	2	42		91
SPA	SPAIN 2)	1	-	-	-	-	-	1						0		1
SWE	SWEDEN *							0						0		0
SWI	SWITZERLAND + LIECHT	8	92	56	4	53	-	213	830	58	66	56	6	1016		1229
TUR	TURKEY	1342	104	554	15	88	37	2140	1	-	-	-	31	32		2172
YUG	YUGOSLAVIA	8	23	13	-	1	3	48	1190	-	-	-	38	1228		1276
TOTAL		1665	846	2004	117	862	55	5549	15488	389	441	705	187	17210	0	22759
PER CENT		7.3	3.7	8.8	0.5	3.8	0.2	24.4	68.1	1.7	1.9	3.1	0.8	75.6	0.0	100.0

* NO CASES, 1) 1 CAT IMPORTED FROM NIGERIA, 2) IN NORTH AFRICA.

20 687

3409 15487 156

1691

16.5% 74.9 % 8.2%

TABLE 3 RABIES CASE RATES (% TOTAL) FOR INDIVIDUAL ANIMAL SPECIES AND FOR TOTAL CASES OF 10 EUROPEAN COUNTRIES RANKING HIGHEST IN 1982.

EUR E U R O P E **1982** 1. 1.82 - 31.12.82

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
EUROPE															
TOTAL RABIES CASES	1665	846	2004	117	862	55	5549	15488	389	441	705	187	17210	0	22759
PER CENT INVOLVEMENT / COUNTRY															
DEU FED.REP. OF GERMANY	3.4	22.7	27.2	31.6	25.7	14.5	19.1	30.1	35.2	58.3	60.4	5.9	31.9		28.8
FRA FRANCE	4.5	15.2	17.3	33.3	33.5	5.5	15.9	15.5	10.5	-	2.7	36.4	14.7		15.0
TUR TURKEY	80.6	12.3	27.6	12.8	10.2	67.3	38.6	0.0	-	-	-	16.6	0.2		9.5
DDR GERMAN DEM. REPUBLIC	3.7	12.3	4.4	4.3	11.8	5.5	6.6	9.5	1.5	8.6	11.1	2.1	9.2		8.6
CZE CZECHOSLOVAKIA	2.2	6.0	0.1	-	0.6	-	1.7	11.1	7.2	6.3	2.8	1.6	10.4		8.3
HUN HUNGARY	1.4	6.4	1.0	-	0.5	1.8	1.8	8.1	1.0	-	0.3	2.7	7.4		6.0
YUG YUGOSLAVIA	0.5	2.7	0.6	-	0.1	5.5	0.9	7.7	-	-	-	20.3	7.1		5.6
SWI SWITZERLAND + LIECHT	0.5	10.9	2.8	3.4	6.1	-	3.8	5.4	14.9	15.0	7.9	3.2	5.9		5.4
AUT AUSTRIA	0.3	2.4	0.9	-	0.6	-	0.9	5.1	16.5	3.4	6.0	-	5.3		4.2
BEL BELGIUM	0.2	2.8	10.5	6.8	6.7	-	5.5	2.3	1.0	1.8	0.6	-	2.2		3.0
TOTALS FROM 10 COUNTRIES	1619	793	1855	108	827	55	5257	14664	342	412	647	166	16231	0	21488
EQUAL % TOTAL	97.2	93.7	92.6	92.3	95.9	100.0	94.7	94.7	87.9	93.4	91.8	88.8	94.3	0.0	94.4

TABLE 4

EUR EUROPE **4/82** RABIES CASES 'OTHER ANIMAL SPECIES' 1.10.82 - 31.12.82

LOCATION CODE	NAME	OTHER DOMESTIC ANIMALS				OTHER WILD ANIMALS								TOTAL
		DONKEY	PIG	OTH.DOM HERBIVO	OTHERS	RACOON DOG	WILD CAT	RACOON	WILD BOAR	MOUFLON	SQUIRREL	HOUSE MOUSE	OTHERS	
DDR	GERMAN DEM. REPUBLIC	1	-	-	-	-	-	-	-	-	-	-	-	1
DEU	FED.REP. OF GERMANY	-	1	-	-	-	-	1	1	1	1	-	-	5
FRA	FRANCE	-	-	-	-	-	-	-	-	-	-	-	14	14
HUN	HUNGARY	-	1	-	-	-	2	-	-	-	-	-	-	3
POL	POLAND	-	-	-	-	3	-	-	-	-	-	-	-	3
SWI	SWITZERLAND + LIECHT	-	-	-	-	-	-	-	1	-	-	-	-	1
TUR	TURKEY	6	-	1	-	-	-	-	-	-	-	5	-	12
YUG	YUGOSLAVIA	-	-	-	2	-	-	-	-	-	-	-	7	9
TOTAL		7	2	1	2	3	2	1	2	1	1	5	21	48
PER CENT		14.6	4.2	2.1	4.2	6.2	4.2	2.1	4.2	2.1	2.1	10.4	43.7	100.0

TABLE 5

EUR EUROPE **1982** RABIES CASES 'OTHER ANIMAL SPECIES' 1. 1.82 - 31.12.82

LOCATION CODE	NAME	OTHER DOMESTIC ANIMALS							OTHER WILD ANIMALS															TOTAL
		DONKEY	MULE	PIG	OTH.DOM. HERBIVOR	DOMESTIC RABBIT	CAT LIV.WILD	OTHERS	WOLF	RACOON DOG	WILD CAT	RACOON	WILD BOAR	MOUFLON	CHAMOIS	OTHER BATS	SQUIRREL	MARMOT	HAMSTER	BLACK RAT	HOUSE MOUSE	MUSKRAT	OTHERS	
CZE	CZECHOSLOVAKIA	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3
DDR	GERMAN DEM. REPUBLIC	1	-	-	-	1	-	1	-	-	2	1	1	-	-	-	-	-	-	-	-	-	-	7
DEU	FED.REP. OF GERMANY	2	-	4	-	1	1	-	-	-	-	1	6	2	-	1	1	-	-	-	-	-	-	19
FRA	FRANCE	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	71
HUN	HUNGARY	-	-	1	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	6
POL	POLAND	-	-	-	-	-	-	-	-	11	-	-	2	-	-	-	2	-	1	1	-	2	-	19
RUM	RUMANIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
SWI	SWITZERLAND + LIECHT	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	-	2	-	-	-	-	-	6
TUR	TURKEY	34	1	-	2	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	22	-	-	68
YUG	YUGOSLAVIA	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	41
TOTAL		37	1	8	2	2	1	4	9	11	10	2	10	2	3	1	3	2	1	1	22	2	108	242
PER CENT		15.3	0.4	3.3	0.8	0.8	0.4	1.7	3.7	4.5	4.1	0.8	4.1	0.8	1.2	0.4	1.2	0.8	0.4	0.4	9.1	0.8	44.6	100.0

AUT AUSTRIA — RABIES CASES — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
B5	NEUSIEDL AM SEE							0	1	-	-	-	-	1		1
B6	OBERPULLENDORF							0	3	-	-	-	-	3		3
B7	OBERWART							0	1	-	-	-	-	1		1
K1	HERMAGOR							0	7	1	-	-	-	8		8
K2	KLAGENFURT-LAND	-	-	1	-	-	-	1	1	-	-	-	-	1		2
K4	SPITTAL/DRAU	-	3	-	-	-	-	3	31	-	-	-	-	31		34
K5	VILLACH-LAND	-	-	1	-	-	-	1	-	-	-	1	-	1		2
N1	AMSTETTEN							0	1	-	-	-	-	1		1
N5	GMUEND							0	1	-	-	-	-	1		1
N10	LILIENFELD							0	10	-	-	-	-	10		10
N11	MELK							0	-	-	-	1	-	1		1
N14	NEUNKIRCHEN	1	-	1	-	-	-	2	32	-	-	3	-	35		37
N15	ST. POELTEN-LAND							0	6	-	-	-	-	6		6
N16	SCHEIBBS	-	-	1	-	-	-	1	1	2	-	-	-	3		4
N18	WAIDHOFEN/THAYA							0	5	-	-	-	-	5		5
N19	WIENER NEUSTADT-LAN							0	2	-	1	-	-	3		3
ST1	BRUCK/MUR							0	1	-	-	-	-	1		1
ST2	DEUTSCHLANDSBERG							0	1	-	-	-	-	1		1
ST5	GRAZ-LAND							0	2	2	-	2	-	6		6
ST6	HARTBERG							0	2	-	-	-	-	2		2
ST7	JUDENBURG	-	-	1	-	-	-	1	6	-	-	-	-	6		7
ST8	KNITTELFELD	1	1	1	-	-	-	3	10	-	-	1	-	11		14
ST9	LEIBNITZ							0	1	-	-	-	-	1		1
ST10	LEOBEN							0	4	-	-	-	-	4		4
ST12	MUERZZUSCHLAG							0	2	-	-	-	-	2		2
ST13	MURAU	-	2	1	-	2	-	5	42	-	1	-	-	43		48
ST15	VOITSBERG							0	2	1	-	-	-	3		3
ST16	WEIZ	-	1	-	-	-	-	1	7	-	-	-	-	7		8
T1	IMST							0	2	-	-	-	-	2		2
T2	INNSBRUCK-LAND							0	1	-	-	2	-	3		3
T3	KITZBUEHEL							0	1	-	-	-	-	1		1
T4	KUFSTEIN	-	-	2	-	-	-	2	11	-	2	-	-	13		15
T6	LIENZ							0	4	-	-	-	-	4		4
T7	REUTTE							0	11	2	1	-	-	14		14
T8	SCHWAZ							0	1	-	-	-	-	1		1
V2	BREGENZ							0	-	-	-	1	-	1		1
V4	DORNBIRN							0	2	-	-	-	-	2		2
TOTAL		2	7	9	0	2	0	20	215	8	5	11	0	239	0	259
PER CENT		0.8	2.7	3.5	0.0	0.8	0.0	7.7	83.0	3.1	1.9	4.2	0.0	92.3	0.0	100.0

RABIES CASES 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
BEL	BELGIUM															
LG	LIEGE	1	2	23	-	1	-	27	29	1	-	-	-	30		57
LX	LUXEMBOURG	1	4	90	5	18	-	118	79	-	1	-	-	80		198
NA	NAMUR	-	-	2	-	1	-	3	15	-	-	-	-	15		18
TOTAL		2	6	115	5	20	0	148	123	1	1	0	0	125	0	273
PER CENT		0.7	2.2	42.1	1.8	7.3	0.0	54.2	45.1	0.4	0.4	0.0	0.0	45.8	0.0	100.0
ITA	ITALY *															
23	SONDRIO							0	32	-	-	-	-	32		32
25	BRESCIA							0	4	-	-	-	-	4		4
32	BELLUNO							0	4	-	-	-	-	4		4
33	UDINE							0	7	1	-	-	-	8		8
34	TRIESTE E GORIZIA							0	2	-	-	-	-	2		2
39	BOLZANO							0	10	1	2	-	-	13		13
TOTAL		0	0	0	0	0	0	0	59	2	2	0	0	63	0	63
PER CENT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.7	3.2	3.2	0.0	0.0	100.0	0.0	100.0
LUX	LUXEMBOURG **															
02	CAPELLEN	-	-	4	-	4	-	8	9	-	-	-	-	9		17
03	ESCH	-	-	1	-	-	-	1						0		1
04	LUXEMBOURG-CAMPAGNE	-	-	1	-	-	-	1	1	-	-	-	-	1		2
05	MERSCH	-	-	1	-	-	-	1	1	-	-	-	-	1		2
06	CLERVAUX	-	-	6	-	-	-	6						0		6
07	DIEKIRCH	-	-	18	-	3	-	21	5	-	1	1	-	7		28
08	REDANGE	-	-	9	1	-	-	10	5	-	-	-	-	5		15
09	WILTZ	-	2	21	1	2	-	26	6	-	-	1	-	7		33
10	VIANDEN	-	-	2	-	-	-	2						0		2
12	GREVENMACHER	-	-	1	-	-	-	1						0		1
TOTAL		0	2	64	2	9	0	77	27	0	1	2	0	30	0	107
PER CENT		0.0	1.9	59.8	1.9	8.4	0.0	72.0	25.2	0.0	0.9	1.9	0.0	28.0	0.0	100.0

* IN CONTRAST TO PREVIOUS ISSUES THE LOCATION IS NO LONGER GIVEN BY COMMUNITY BUT BY PROVINCE NAME.
** LOCATION GIVEN BY CANTON NAME.

RABIES CASES 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
CZE	CZECHOSLOVAKIA															
00	DISTRICT OF PRAGUE							0						0		0
01	CENTRAL BOHEMIA	-	2	-	-	-	-	2	40	-	1	1	-	42		44
02	SOUTH BOHEMIA	-	2	-	-	-	-	2	34	-	-	-	-	34		36
03	WEST BOHEMIA	3	4	-	-	1	-	8	178	3	-	3	-	184		192
04	NORTH BOHEMIA	-	1	-	-	-	-	1	30	-	-	-	-	30		31
05	EAST BOHEMIA	-	1	-	-	-	-	1	56	1	2	1	-	60		61
06	SOUTH MORAVIA	-	2	-	-	-	-	2	49	-	2	1	-	52		54
07	NORTH MORAVIA	1	-	-	-	-	-	1	23	2	-	1	-	26		27
0	CSR	4	12	-	-	1	-	17	410	6	5	7	-	428		445
10	DISTRICT OF BRATISLAV							0						0		0
11	WEST SLOVAKIA	-	5	-	-	-	-	5	3	-	-	-	-	3		8
12	CENTRAL SLOVAKIA	1	3	-	-	-	-	4	28	-	-	-	-	28		32
13	EAST SLOVAKIA	3	2	-	-	-	-	5	18	1	-	-	-	19		24
1	SSR	4	10	-	-	-	-	14	49	1	-	-	-	50		64
TOTAL		8	22	0	0	1	0	31	459	7	5	7	0	478	0	509
PER CENT		1.6	4.3	0.0	0.0	0.2	0.0	6.1	90.2	1.4	1.0	1.4	0.0	93.9	0.0	100.0
DDR	GERMAN DEMOCRATIC REPUBLIC															
01	HAUPTSTADT BERLIN							0	1	-	-	-	-	1		1
02	COTTBUS	-	3	-	-	-	-	3	19	-	-	2	-	21		24
03	DRESDEN	-	2	-	-	10	-	12	13	-	-	-	-	13		25
04	ERFURT	1	6	6	1	3	-	17	43	-	1	2	-	46		63
05	FRANKFURT/ODER	2	4	-	-	-	-	6	13	-	2	2	-	17		23
06	GERA	1	1	-	-	5	-	7	43	-	-	3	-	46		53
07	HALLE	1	3	1	1	1	-	7	18	-	-	3	-	21		28
08	KARL-MARX-STADT	2	12	5	-	23	-	42	43	-	2	1	-	46		88
09	LEIPZIG	-	-	1	-	2	-	3	3	-	-	1	-	4		7
10	MAGDEBURG	3	5	14	1	-	-	23	69	-	2	3	-	74		97
11	NEUBRANDENBURG	-	2	2	-	-	-	4	24	-	3	-	-	27		31
12	POTSDAM	2	2	4	-	1	1	10	43	-	2	6	-	51		61
13	ROSTOCK	2	1	3	-	1	-	7	33	-	-	1	-	34		41
14	SCHWERIN	3	3	5	-	1	-	12	51	-	2	3	-	56		68
15	SUHL	-	1	-	-	3	-	4	20	-	-	1	-	21		25
TOTAL		17	45	41	3	50	1	157	436	0	14	28	0	478	0	635
PER CENT		2.7	7.1	6.5	0.5	7.9	0.2	24.7	68.7	0.0	2.2	4.4	0.0	75.3	0.0	100.0

DEU FEDERAL REPUBLIC OF GERMANY — R A B I E S C A S E S — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
010	SCHLESWIG-HOLSTEIN	1	1	1	-	-	-	3	2	1	2	-	-	5		8
020	HAMBURG							0						0		0
031	BRAUNSCHWEIG	-	3	4	1	-	-	8	20	-	-	-	-	20		28
032	HANNOVER	-	2	21	2	2	-	27	17	4	1	1	-	23		50
033	LUENEBURG	1	1	9	1	1	-	13	39	-	3	1	-	43		56
034	WESER-EMS							0	12	-	-	-	1	13		13
040	BREMEN							0						0		0
051	DUESSELDORF							0						0		0
053	KOELN	3	1	47	3	11	-	65	76	1	1	4	-	82		147
055	MUENSTER							0						0		0
057	DETMOLD	2	4	12	1	-	-	19	35	2	5	11	-	53		72
059	ARNSBERG	-	3	-	1	-	-	4	12	-	-	-	-	12		16
061	DARMSTADT	3	3	18	1	5	-	30	148	6	6	19	1	180		210
062	KASSEL	4	10	70	3	12	1	100	197	2	22	36	2	259		359
071	KOBLENZ	-	4	26	-	10	-	40	104	2	2	10	-	118		158
072	TRIER	1	7	27	1	5	-	41	14	2	4	2	-	22		63
073	RHEINHESSEN-PFALZ	1	10	1	-	1	-	13	18	-	2	6	-	26		39
081	STUTTGART	1	1	5	-	-	-	7	110	-	-	5	-	115		122
082	KARLSRUHE	-	3	6	-	2	-	11	69	2	-	15	-	86		97
083	FREIBURG	1	2	10	-	3	-	16	99	6	6	11	-	122		138
084	TUEBINGEN	-	4	12	-	-	-	16	79	5	7	5	-	96		112
091	OBERBAYERN	-	2	9	-	-	-	11	85	-	2	2	-	89		100
092	NIEDERBAYERN							0	5	-	-	-	-	5		5
093	OBERPFALZ	3	-	-	-	-	-	3	33	-	2	1	-	36		39
094	OBERFRANKEN	1	2	-	-	-	-	3	21	-	3	1	-	25		28
095	MITTELFRANKEN							0	11	-	1	-	-	12		12
096	UNTERFRANKEN	1	-	1	-	-	-	2	16	1	1	-	-	18		20
097	SCHWABEN	-	6	15	-	-	-	21	61	-	7	9	-	77		98
100	SAARLAND	-	-	3	-	-	-	3	16	-	-	-	-	16		19
110	BERLIN (WEST)							0	1	-	-	-	-	1		1
TOTAL		23	69	297	14	52	1	456	1300	34	77	139	4	1554	0	2010
PER CENT		1.1	3.4	14.8	0.7	2.6	0.0	22.7	64.7	1.7	3.8	6.9	0.2	77.3	0.0	100.0

FRA F R A N C E — R A B I E S C A S E S — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
01	AIN							0	5	-	-	-	-	5		5
02	AISNE	-	1	-	-	2	-	3	17	-	-	1	-	18		21
08	ARDENNES	-	1	25	1	2	-	29	18	-	-	-	1	19		48
10	AUBE	-	1	-	-	-	-	1	29	-	-	-	-	29		30
21	COTE D'OR	3	5	10	2	7	-	27	42	1	-	-	2	45		72
25	DOUBS	-	5	4	-	12	-	21	58	-	-	1	1	60		81
29	FINISTERE	1	-	-	-	-	-	1						0		1
33	GIRONDE	1	-	-	-	-	-	1						0		1
38	ISERE							0	2	1	-	-	-	3		3
39	JURA	1	1	5	1	6	-	14	115	1	-	-	-	116		130
51	MARNE	1	2	1	-	-	-	4	2	-	-	-	-	2		6
52	MARNE (HAUTE)	-	1	4	1	4	-	10	20	-	-	-	1	21		31
54	MEURTHE-ET-MOSELLE	-	2	5	-	-	-	7	13	1	-	-	-	14		21
55	MEUSE	1	2	21	-	1	-	25	14	-	-	2	1	17		42
57	MOSELLE	-	2	25	-	1	-	28	14	-	-	2	-	16		44
58	NIEVRE							0	5	-	-	-	-	5		5
62	PAS DE CALAIS	-	-	-	1	-	-	1						0		1
67	RHIN (BAS)	2	2	3	2	2	-	11	8	-	-	-	-	8		19
68	RHIN (HAUT)							0	2	-	-	-	-	2		2
70	SAONE (HAUTE)	-	2	1	1	2	-	6	25	-	-	-	3	28		34
71	SAONE-ET-LOIRE	-	-	1	-	-	-	1	7	-	-	-	-	7		8
73	SAVOIE	-	5	-	-	-	-	5	27	-	-	-	1	28		33
74	SAVOIE (HAUTE)	1	3	1	1	1	-	7	27	2	-	-	-	29		36
88	VOSGES	3	2	2	2	5	-	14	20	1	-	-	2	23		37
89	YONNE							0	24	-	-	-	2	26		26
99	NO LOCATION	1	-	-	-	-	-	1						0		1
TOTAL		15	37	108	12	45	0	217	494	7	0	6	14	521	0	738
PER CENT		2.0	5.0	14.6	1.6	6.1	0.0	29.4	66.9	0.9	0.0	0.8	1.9	70.6	0.0	100.0

HUN HUNGARY — RABIES CASES — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
01	BUDAPEST							0	6	-	-	-	-	6		6
02	BARANYA	-	4	-	-	-	1	5	10	-	-	-	-	10		15
03	BACS-KISKUN	2	-	2	-	-	-	4	15	-	-	-	-	15		19
04	BEKES							0	16	-	-	-	-	16		16
05	BORSOD-ABAU-ZEMPLEN	-	2	-	-	-	-	2	53	-	-	-	1	54		56
06	CSONGRAD							0	13	-	-	-	-	13		13
07	FEJER	1	1	-	-	-	-	2	35	-	-	-	-	35		37
08	GYOER-SOPRON							0	18	-	-	-	-	18		18
09	HAJDU-BIHAR	-	1	-	-	-	-	1	4	-	-	-	1	5		6
10	HEVES							0	9	-	-	-	-	9		9
11	KOMAROM	-	1	-	-	-	-	1	13	-	-	-	-	13		14
12	NOGRAD	-	1	-	-	-	-	1	6	-	-	-	-	6		7
13	PEST							0	35	-	-	-	-	35		35
14	SOMOGY	-	1	-	-	-	-	1	13	-	-	-	-	13		14
15	SZABOLCS-SZATMAR	1	3	-	-	-	-	4	9	-	-	-	-	9		13
16	SZOLNOK							0	1	-	-	-	-	1		1
17	TOLNA	1	-	-	-	1	-	2	8	-	-	-	-	8		10
18	VAS							0	13	-	-	-	-	13		13
19	VESZPREM							0	20	-	-	-	-	20		20
20	ZALA	-	1	2	-	-	-	3	14	-	-	-	-	14		17
TOTAL		5	15	4	0	1	1	26	311	0	0	0	2	313	0	339
PER CENT		1.5	4.4	1.2	0.0	0.3	0.3	7.7	91.7	0.0	0.0	0.0	0.6	92.3	0.0	100.0

POL POLAND — RABIES CASES — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
03	BIALA PODLASKA	-	-	-	2	-	-	2						0		2
05	BIALYSTOK	-	1	-	-	-	-	1						0		1
09	BYDGOSZCZ	-	-	8	-	-	-	8						0		8
11	CHELM							0	3	-	-	-	-	3		3
15	CZESTOCHOWA							0	2	-	1	-	-	3		3
17	ELBLAG	-	-	1	-	-	-	1	3	-	-	-	-	3		4
19	GDANSK							0	-	1	-	-	-	1		1
21	GORZOW							0	1	-	-	-	-	1		1
23	JELENIA GORA	-	-	1	-	-	-	1	12	-	-	-	-	12		13
27	KATOWICE							0	1	-	-	-	-	1		1
29	KIELCE							0	2	-	-	-	-	2		2
31	KONIN							0	1	-	-	-	-	1		1
33	KOSZALIN	5	2	3	-	-	-	10	10	1	2	2	-	15		25
35	KRAKOW							0	2	-	-	-	-	2		2
39	LEGNICA	-	-	1	1	-	-	2	12	-	-	-	-	12		14
41	LESZNO							0	3	-	-	-	-	3		3
43	LUBLIN							0	-	-	-	-	1	1		1
45	LOMZA	1	-	-	-	-	-	1						0		1
51	OLSZTYN	1	-	1	-	-	-	2	4	-	1	1	-	6		8
53	OPOLE							0	1	-	-	-	-	1		1
57	PILA	-	1	-	-	-	-	1	2	-	-	-	-	2		3
63	POZNAN	2	-	-	-	-	-	2	1	-	-	-	-	1		3
71	SIEDLCE							0	1	-	-	-	-	1		1
77	SLUPSK							0	5	-	1	3	-	9		9
79	SUWALKI	1	2	1	-	-	-	4	1	-	-	-	1	2		6
81	SZCZECIN							0	9	-	2	1	1	13		13
85	TARNOW	-	1	-	-	-	-	1	1	-	-	-	-	1		2
87	TORUN	-	2	2	-	-	-	4	1	-	-	-	-	1		5
89	WALBRZYCH	-	2	4	-	2	-	8	17	-	-	-	-	17		25
91	WLOCLAWEK	2	-	-	-	-	-	2						0		2
93	WROCLAW	1	-	1	-	-	-	2	6	-	-	-	-	6		8
95	ZAMOSC							0	2	-	-	-	-	2		2
97	ZIELONA GORA	4	3	-	-	-	-	7	9	-	-	-	-	9		16
TOTAL		17	14	23	3	2	0	59	112	2	7	7	3	131	0	190
PER CENT		8.9	7.4	12.1	1.6	1.1	0.0	31.1	58.9	1.1	3.7	3.7	1.6	68.9	0.0	100.0

RABIES CASES 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
RUM	RUMANIA															
01	ALBA							0	1	-	-	-	-	1		1
02	ARAD							0	-	1	-	-	-	1		1
08	BRASOV	-	1	-	-	-	-	1						0		1
11	CARAS-SEVERIN	-	-	1	-	-	-	1						0		1
21	HARGHITA							0	2	-	-	-	-	2		2
22	HUNEDOARA	1	1	-	-	-	-	2	4	-	-	-	-	4		6
24	IASI							0	-	2	-	-	-	2		2
25	MARAMURES							0	-	1	-	-	-	1		1
31	SATU-MARE							0	1	-	-	-	-	1		1
32	SALAJ	-	1	-	-	-	-	1	1	-	-	-	-	1		2
33	SIBIU	1	-	-	-	-	-	1						0		1
TOTAL		2	3	1	0	0	0	6	9	4	0	0	0	13	0	19
PER CENT		10.5	15.8	5.3	0.0	0.0	0.0	31.6	47.4	21.1	0.0	0.0	0.0	68.4	0.0	100.0
YUG	YUGOSLAVIA *															
I	SR BOSNA I HERCEGOVI	-	-	2	-	-	-	2	13	-	-	-	2	15		17
III	SR HRVATSKA							0	78	-	-	-	-	78		78
V	SR SLOVENIJA	-	3	-	-	-	-	3	66	-	-	-	5	71		74
VI	SR SRBIJA	-	1	-	-	-	-	1	1	-	-	-	-	1		2
VI1	SAP VOJVODINA	-	4	4	-	-	2	10	29	-	-	-	-	29		39
TOTAL		0	8	6	0	0	2	16	187	0	0	0	7	194	0	210
PER CENT		0.0	3.8	2.9	0.0	0.0	1.0	7.6	89.0	0.0	0.0	0.0	3.3	92.4	0.0	100.0

* IN CONTRAST TO PREVIOUS ISSUES THE LOCATION IS NO LONGER GIVEN BY THE SMALLER BUT BY THE GREATER ADMINISTRATIVE UNIT (SR, SAP).

SWI SWITZERLAND AND LIECHTENSTEIN — R A B I E S C A S E S — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
01	AARGAU							0	3	-	-	-	-	3		3
02	APPENZELL A.RH.							0	1	-	-	-	-	1		1
05	BASEL-LAND	-	1	-	-	-	-	1	2	-	1	1	-	4		5
06	BERN	-	2	-	-	4	-	6	14	3	1	-	-	18		24
07	FRIBOURG	1	4	3	1	7	-	16	16	-	1	-	-	17		33
08	GENEVE							0	3	-	-	-	-	3		3
10	GRAUBUENDEN	-	2	2	-	1	-	5	16	1	-	1	-	18		23
12	NEUCHATEL	-	1	-	-	-	-	1						0		1
15	SCHAFFHAUSEN	-	-	1	-	-	-	1	17	1	1	4	-	23		24
16	SCHWYZ							0	9	-	1	-	-	10		10
17	SOLOTHURN							0	3	-	-	-	-	3		3
18	ST.GALLEN	-	-	8	-	2	-	10	18	-	-	-	-	18		28
20	THURGAU	-	8	12	1	2	-	23	13	-	-	1	-	14		37
21	URI	-	-	1	-	-	-	1	1	1	-	1	-	3		4
22	VAUD	-	4	3	1	4	-	12	35	2	2	1	1	41		53
25	ZUERICH	-	4	-	-	-	-	4	24	1	3	-	-	28		32
26	JURA	-	-	-	1	-	-	1						0		1
TOTAL		1	26	30	4	20	0	81	175	9	10	9	1	204	0	285
PER CENT		0.4	9.1	10.5	1.4	7.0	0.0	28.4	61.4	3.2	3.5	3.2	0.4	71.6	0.0	100.0

TUR TURKEY — RABIES CASES — 1.10.82 - 31.12.82

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
001	ADANA	4	-	1	-	-	1	6	-	-	-	-	1	1		7
003	AFYON	8	-	6	-	-	-	14						0		14
004	AGRI	-	1	1	-	-	-	2						0		2
005	AMASYA	2	-	3	-	-	-	5						0		5
006	ANKARA	6	-	5	-	1	-	12						0		12
007	ANTALYA	1	-	2	-	-	-	3						0		3
009	AYDIN	7	1	9	-	-	-	17						0		17
010	BALIKESIR	12	1	2	-	3	-	18						0		18
011	BILECIK	16	-	-	-	-	1	17						0		17
012	BINGOEL	-	-	1	-	-	-	1						0		1
014	BOLU	5	-	1	-	-	-	6						0		6
015	BURDUR	3	-	1	-	-	-	4						0		4
016	BURSA	28	4	1	-	1	-	34	1	-	-	-	2	3		37
017	CANAKKALE	7	-	2	-	-	-	9						0		9
018	CANKIRI	3	-	2	-	-	-	5						0		5
019	CORUM	9	-	3	-	-	-	12						0		12
020	DENIZLI	5	1	1	-	-	-	7	-	-	-	-	1	1		8
021	DIYARBAKIR	2	-	3	-	1	1	7						0		7
022	EDIRNE	2	-	3	-	-	-	5						0		5
023	ELAZIG	1	-	8	-	-	-	9						0		9
024	ERZINCAN	1	-	-	-	-	-	1						0		1
025	ERZURUM	-	1	-	-	-	-	1						0		1
026	ESKISEHIR	1	-	-	-	-	-	1						0		1
027	GAZIANTEP	2	-	1	-	-	-	3						0		3
028	GIRESUN	1	-	-	-	1	-	2						0		2
029	GUEMUESHANE	2	-	-	-	-	-	2						0		2
032	ISPARTA	1	-	-	-	-	-	1						0		1
033	ICEL	9	-	-	-	-	1	10	-	-	-	-	1	1		11
034	ISTANBUL	22	2	5	-	1	-	30						0		30
035	IZMIR	32	6	6	-	-	-	44						0		44

TUR CONTINUED

LOCATION CODE	NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
036	KARS	1	-	2	-	-	-	3						0		3
037	KASTAMONU	8	1	6	-	-	1	16						0		16
038	KAYSERI	4	-	1	-	1	-	6						0		6
039	KIRKLARELI	2	-	3	-	-	1	6						0		6
040	KIRSEHIR	5	-	2	-	-	-	7						0		7
041	KOCAELI	12	1	-	-	1	-	14						0		14
042	KONYA	5	1	2	1	-	-	9						0		9
043	KUETAHYA	1	-	1	-	-	-	2						0		2
045	MANISA	8	-	3	-	-	1	12						0		12
046	KAHRAMAN MARAS	-	1	-	-	-	-	1						0		1
047	MARDIN	2	-	1	-	-	-	3						0		3
048	MUGLA	2	1	5	-	-	-	8						0		8
049	MUS	2	-	4	-	-	-	6						0		6
050	NEVSEHIR	-	-	1	-	-	-	1						0		1
051	NIGDE	2	-	2	-	-	-	4						0		4
052	ORDU	7	-	4	-	1	-	12						0		12
054	SAKARYA	9	-	10	-	-	-	19						0		19
055	SAMSUN	14	-	4	-	1	-	19						0		19
057	SINOP	3	1	8	-	-	-	12						0		12
058	SIVAS	1	-	3	-	-	-	4						0		4
059	TEKIRDAG	2	1	2	-	1	-	6						0		6
060	TOKAT	5	-	5	-	-	-	10						0		10
063	URFA	1	-	-	-	-	-	1						0		1
064	USAK	1	-	2	-	2	-	5						0		5
066	YOZGAT	6	-	4	-	-	-	10						0		10
067	ZONGULDAK	2	2	1	-	-	-	5						0		5
TOTAL		297	26	143	1	15	7	489	1	0	0	0	5	6	0	495
PER CENT		60.0	5.3	28.9	0.2	3.0	1.4	98.8	0.2	0.0	0.0	0.0	1.0	1.2	0.0	100.0

USR UNION OF SOVIET SOCIALIST REPUBLICS (EUROPEAN PART)

R A B I E S C A S E S IN ANIMALS

1. 7.82 - 30. 9.82

LOCATION CODE	NAME	DATES 1. 7. - 31. 7.	1. 8. - 31. 8.	1. 9. - 30. 9.	TOTAL
01	RSFSR .				
011	REGIONS OF THE NORTH AND THE NORTH-WEST	-	-	-	-
012	REGIONS OF THE CENTRE	6	5	7	18
013	REGIONS OF THE NORTH CAUCASUS	4	-	3	7
014	REGIONS OF THE POVOLJE AND THE URALS	5	3	2	10
02	THE MOLDAVIAN SSR	1	-	1	2
03	THE UKRAINIAN SSR	31	28	29	88
04	THE BYELORUSSIAN SSR	5	9	8	22
05	THE LITHUANIAN SSR	2	2	5	9
03	THE LATVIAN SSR	1	3	6	7
07	THE ESTONIAN SSR	-	1	4	5
TOTAL		55	51	62	168

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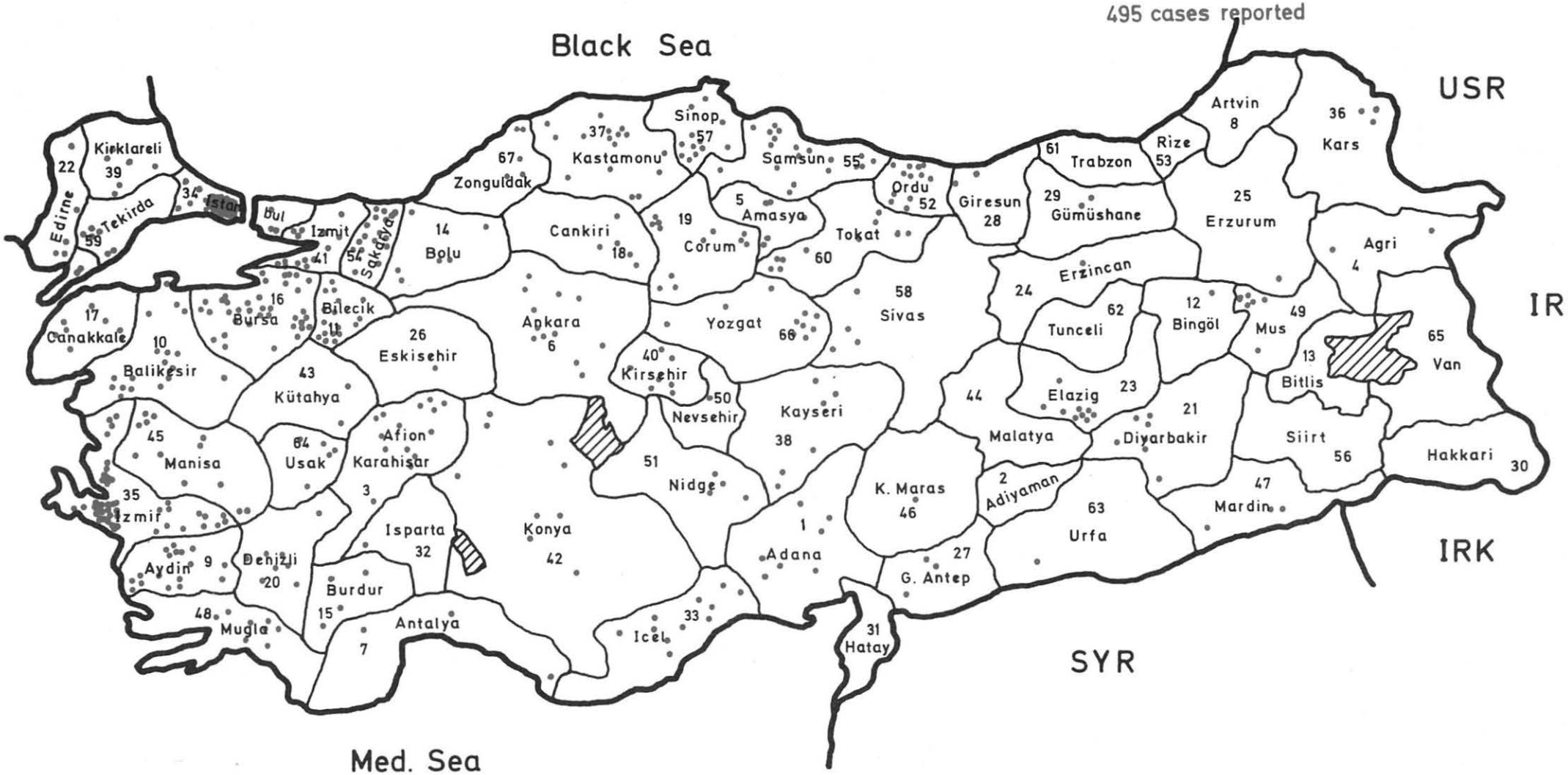
WHO Coll. Centre
Tuebingen / DEU

Rabies Cases Turkey
4th Quarter 1982
495 cases reported



WHO Coll. Centre
Tuebingen / DEU

Rabies Cases Europe
4th Quarter 1982

6132 cases reported

NOR
(0)

FIN
(rabies free)

SWE
(rabies free)

DEN
(0)

IRE
(rabies free)

GBR
(rabies free)

NET
(rabies free)

BEL
(273)

(2010)
DEU

DDR
(635)

POL
(190)

CZE
(509)

FRA
(738)

AUT
(259)

HUN
(339)

SWI
(285)

RUM
(19)

ITA
(63)

YUG
(210)

BUL
(rabies free)

POR
(rabies free)

SPA
(0)

ALB
(no data)

GRE
(0)

TUR
(495)

0 50 100 km